## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



N 83 Et September 1949

> United States Department of Agriculture Agricultural Research Administration Bureau of Entomology and Plant Quarantine

## A COLLAPSIBLE CAGE FOR FIELD USE

By R. L. Wallis

Division of Truck Crop and Garden Insect Investigations

An inexpensive insect cage for field use has been devised, which is easily operated and collapsible so that it can be readily stored. It can be constructed in any desired size and covered with various materials to make it suitable for different insects. Cages of the size and material described have been used to cage potato psyllids and tuber flea beetles.

The frame of the cage is constructed with two 1/4-inch smooth concrete reinforcing rods 8 1/2 feet long. Each rod is bent into a U-shape with 21 inches between the sides; 17 1/2 inches of the rod at each end is bent inward 1 1/2 inches as shown in figure 1.

Another rod of the same material is made into a ring 17 inches in diameter, and marked at four equidistant points. This ring is placed on the ground where the cage is to be set. The U-shaped rods are then inserted into the ground, one at right angles to the other, nearly to the bend, at the indicated points outside the ring (fig. 2). The two rods are tied at the top. The ring is then removed and used for setting other cages. This forms the frame for a square cage 21 by 21 inches and 28 1/2 inches high.

The cloth cover is made of muslin, though any material desired may be used (fig. 3). A piece of cloth 36 inches wide and 59 inches long is sewed together to form a sack open at both ends. A drawstring is sewed in one end. This cover is pulled over the frame of the cage and the drawstring pulled under the inward bends at the ground. The frame is then pushed further into the soil so that the bends firmly contact the soil. The lower edge of the cloth on the inside is covered with soil to prevent insects from escaping under it, and the upper edge is gathered and tied with a cord to close the cage. The cloth cover is not fastened to the frame at any point.

The frame of the cage is painted to prevent rust from staining the cloth. It has been found that the cloth will last 2 to 3 months in the summer in a dry climate. By painting the lower 3 or 4 inches where it comes in contact with the gound, the cloth will last longer.

The cage is opened by untying the cloth at the top. If it is necessary to open the cage frequently, or to prevent the escape of very active insects, a zipper or sleeve may be sewed in the side of the cage. If a celluloid window is provided, observations can be made without opening the cage.

This cage has the particular advantage of being easy to store. A space 2 by 3 by 4 feet will store approximately 100 cages.

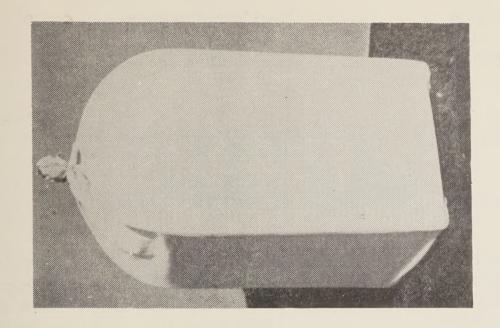


Figure 3.--Complete cage.

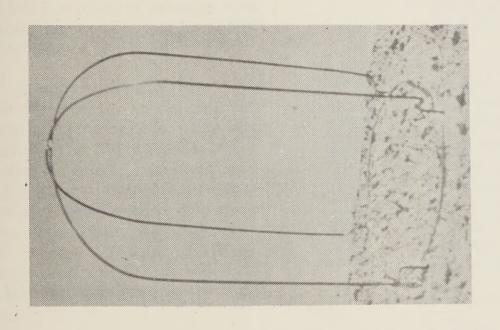


Figure 2.--Frame of the cage in place ready for the cloth cover, showing the ring used for spacing the points of the of the frame. The ring is removed before the cloth cover is put on.

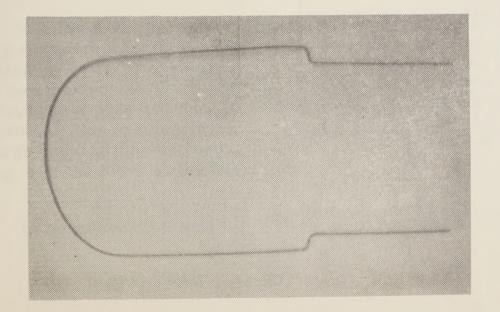


Figure 1.--One section of the frame of the cage.

CURRENT SERVIL DECURE